

2011 World Congress on Osteoarthritis



2011 OARSI World Congress Program – OA Horizons in Pain and Joint Structure

Thursday, September 15, 2011

- 12:00PM – 1:30PM **Concurrent Session 1**
Mechanisms of Nociception in OA
- 12:00PM – 12:30PM I-1. Mechanisms of Nociception in OA p.S1
Hans-Georg Schaible
- 12:30PM – 12:40PM 1. A ROLE FOR CHEMOKINES AND NGF IN PAIN GENERATION IN A MURINE MODEL OF p.S7
OSTEOARTHRITIS
R.E. Miller, P. Tran, N. Ghoreishi-Haack, R. Das, A-M. Malfait; *Rush Univ. Med. Ctr., Chicago, IL, USA*
- 12:40PM – 12:50PM 2. QUADRICEPS WEAKNESS PREDICTS WORSENING OF KNEE PAIN AND FUNCTION IN THE MOST p.S7
COHORT: A LONGITUDINAL STUDY
N. Segal¹, N.A. Glass¹, J. Torner¹, K. Wang², D.T. Felson², M. Nevitt³, C.E. Lewis⁴; ¹*Univ. of Iowa, Iowa City, IA, USA*; ²*Boston Univ., Boston, MA, USA*; ³*Univ. of California at San Francisco, San Francisco, CA, USA*; ⁴*Univ. of Alabama at Birmingham, Birmingham, AL, USA*
- 12:50PM – 1:00PM 3. SERUM OPIOID MONITORING IN OSTEOARTHRITIS PATIENTS WITH CHRONIC PAIN: THE SEARCH p.S8
FOR SENSITIVE BIOMARKERS.
Y. Savitskaya, C. Duarte, N. Marin, R. Tellez, A. Alfaro, A. Izaguirre, E. Villalobos, A. Almazan, C. Ibarra; *Natl. Inst. of Rehabilitation, Mexico, Mexico*
- 1:00PM – 1:10PM 4. OSTEOPOINTIN LEVEL IN SYNOVIAL FLUID IS ASSOCIATED WITH THE SEVERITY OF KNEE JOINT p.S8
PAIN
M. Yamaga, K. Tsuji, K. Miyatake, J. Yamada, I. Sekiya, T. Muneta; *Tokyo Med. and Dental Univ., Tokyo, Japan*
- 1:10PM – 1:20PM 5. IDENTIFYING PAIN VULNERABILITY PHENOTYPES IN OSTEOARTHRITIS p.S8
A.E. Nelson¹, R.F. DeVellis^{1,2}, B.M. DeVellis², Y.M. Golightly¹, W. Maixner^{3,4}, J.M. Jordan¹; ¹*Univ. of North Carolina, Thurston Arthritis Res. Ctr., Chapel Hill, NC, USA*; ²*Univ. of North Carolina, Gillings Sch. of Global Publ. Hlth., Dept. of Hlth.Behavior and Hlth.Ed., Chapel Hill, NC, USA*; ³*Univ. of North Carolina, Sch. of Med., Dept. of Endodontics, Chapel Hill, NC, USA*; ⁴*Univ. of North Carolina, Dept. of Pharmacy, Chapel Hill, NC, USA*
- 1:20PM – 1:30PM 6. A NOVEL TECHNOLOGY TO DECREASE KNEE PAIN AND JOINT LOAD IN EARLY-ONSET KNEE p.S9
OSTEOARTHRITIS
J. Takacs¹, J.R. Leiter^{2,3}, J.D. Peeler^{1,3}; ¹*Dept. of Human Anatomy and Cell Sci., Univ. of Manitoba, Winnipeg, MB, Canada*; ²*Dept. of Human Anatomy and Cell Sci., Dept. of Surgery, Univ. of Manitoba, Winnipeg, MB, Canada*; ³*Pan Am Clinic, Winnipeg, MB, Canada*
- 12:00PM – 1:30PM **Concurrent Session 2**
Frontiers in Imaging OA Joints
- 12:00PM – 12:30PM I-2. Frontiers in Imaging OA Joints p.S1
Marie Antonietta D'Agostino, MD
- 12:30PM – 12:40PM 7. PROGNOSIS OF CARTILAGE LOSS BY ANALYZING MAGNETIC RESONANCE IMAGING OF THE TIBIA p.S9
TRABECULAR BONE STRUCTURE
J. Marques^{1,2}, E. Dam²; ¹*Univ. of Copenhagen, Copenhagen, Denmark*; ²*BiomedIQ S/A, Rødovre, Denmark*
- 12:40PM – 12:50PM 8. BONE MARROW LESIONS IN KNEE OSTEOARTHRITIS CHANGE IN 6 TO 12 WEEKS p.S10
D.T. Felson¹, M.J. Callaghan¹, M. Parkes¹, E.J. Marjanovic¹, M. Lunt¹, J.A. Oldham¹, A. Gait¹, C.E. Hutchinson²; ¹*Univ. of Manchester, Manchester, United Kingdom*; ²*Univ. of Warwick, Warwick, United Kingdom*

12:50 PM – 1:00 PM	9. RELATIONSHIP BETWEEN ARTHROSCOPIC FINDINGS AT THE TIME OF ACL RECONSTRUCTION AND TIBIOFEMORAL JOINT SPACE WIDTH. T.W. Tourville , R.J. Johnson, S. Naud, J.R. Slauterbeck, B.D. Beynnon; <i>Univ. of Vermont, Burlington, VT, USA</i>	p.S11
1:00 PM – 1:10 PM	10. IN VIVO MRI UTE-T2* IS ELEVATED IN BOTH TORN AND SURFACE INTACT HUMAN MENISCI OF ANTERIOR CRUCIATE LIGAMENT INJURED KNEES A. Williams, Y. Qian, C.R. Chu , M. Bowers; <i>Univ. of Pittsburgh, Pittsburgh, PA, USA</i>	p.S11
1:10 PM – 1:20 PM	11. THE PATELLOFEMORAL JOINT IS THE MOST COMMON COMPARTMENT AFFECTED BY STRUCTURAL FEATURES OF KNEE OSTEOARTHRITIS USING MAGNETIC RESONANCE IMAGING DATA J. Stefanik ¹ , J. Niu ¹ , K.D. Gross ^{1,2} , F. Roemer ³ , A. Guermazi ¹ , D. Felson ¹ ; ¹ BUSM, Boston, MA, USA; ² MGHHP, Boston, MA, USA ; ³ Klinikum Augsburg, Augsburg, Germany	p.S12
1:20 PM – 1:30 PM	12. IDENTIFICATION OF MRI MORPHOLOGIC FEATURES ASSOCIATED WITH DIFFERENT KNEE PAIN PATTERNS C.K. Kwoh ¹ , R. Boudreau ² , A. Guermazi ³ , M.J. Hannon ² , S.M. Green ² , J.M. Jakicic ⁴ , C. Moore ⁵ , F.W. Roemer ⁶ ; ¹ Univ. of Pittsburgh/VA Pittsburgh Hlth.care System, Pittsburgh, PA, USA; ² Univ. of Pittsburgh Sch. of Med., Pittsburgh, PA, USA ; ³ Quantitative Imaging Ctr., Boston Univ. Sch. of Med., Boston, MA, USA ; ⁴ Univ. of Pittsburgh Sch. of Ed., Pittsburgh, PA, USA ; ⁵ Texas Woman's Univ., Houston, TX, USA ; ⁶ Klinikum Augsburg, Augsburg, Germany	p.S12
2:00 PM – 3:30 PM	Plenary Session 1 Metabolism, Inflammation & OA	
2:00 PM – 2:30 PM	Metabolism, Inflammation & OA <i>Clay Semenkovich, MD</i>	
2:30 PM – 2:40 PM	13. OSTEOARTHRITIS SEVERITY IS ASSOCIATED WITH INCREASED RISK FOR DIABETES AND HEART DISEASE G.A. Hawker , A. Warner, T. Simms; <i>Women's Coll. Hosp., Toronto, ON, Canada</i>	p.S13
2:40 PM – 2:50 PM	14. SERUM ADIPOKINES IN END-STAGE OSTEOARTHRITIS; COMPARISON WITH HEALTHY CONTROLS AND RELATIONS WITH INTRA-ARTICULAR JOINT CHARACTERISTICS T.N. de Boer ¹ , S.C. Mastbergen ¹ , A.M. Huisman ² , J.W. Bijlsma ¹ , F.P. Lafeber ¹ ; ¹ Rheumatology & Clinical Immunology, Univ. Med. Ctr. Utrecht, Utrecht, Netherlands; ² Rheumatology, Sint Franciscus Gasthuis, Rotterdam, Netherlands	p.S13
2:50 PM – 3: 00 PM	15. CARTILAGE IS NOT THE FIRST KNEE TISSUE TO DEGENERATE IN ASSOCIATION WITH FEMALE HORMONAL ASPECTS B.M. de Klerk , D. Schiphof, E.H. Oei, H. Weinans, A. Hofman, B. Koes, S.M. Bierma-Zeinstra; <i>Erasmus Univ. Med. Ctr., Rotterdam, Netherlands</i>	p.S14
3:00 PM – 3:10 PM	16. ADIPOSE STROMAL CELLS DOWN-MODULATE INFLAMMATORY FACTORS IN SYNOVIOCYTES AND CHONDROCYTES FROM OSTEOARTHRITIS PATIENTS C. Manferdini ¹ , A. Piacentini ¹ , M. Maumus ² , E. Gabusi ¹ , J-A. Peyrafitte ³ , C. Jorgensen ² , A. Facchini ¹ , D. Noel ² , G. Lisignoli ¹ ; ¹ Istituto Ortopedico Rizzoli, IOR, Bologna, Italy; ² Inserm, Montpellier, France ; ³ EFS-PM, Toulouse, France	p.S14
3:10 PM – 3:20 PM	17. THE EFFECT OF BARIATRIC SURGERY ON THE RESOLUTION AND SEVERITY OF OSTEOARTHRITIS AND OTHER OBESITY-RELATED COMORBIDITIES J.X. Liu, J.K. Saunders, M. Parikh, S.B. Abramson ; <i>NYU Hosp. for Joint Diseases, New York, NY, USA</i>	p.S14
3:20 PM – 3:30 PM	18. BODY COMPOSITION AND MENISCAL TEARS IN COMMUNITY BASED ADULTS M. Davies-Tuck ¹ , A. Wluka ¹ , Y. Wang ¹ , B. Strauss ¹ , J. Martel-Pelletier ² , J-P. Pelletier ² , J. Proietto ³ , J. Dixon ⁴ , S. Tanamas ¹ , G. Jones ⁵ , F. Cicuttini ¹ ; ¹ Monash Univ., Melbourne, Australia; ² Univ. of Montreal Hosp. Ctr., Montreal, QC, Canada ; ³ Univ. of Melbourne, Melbourne, Australia ; ⁴ Baker IDI Heart and Diabetes Inst., Melbourne, Australia ; ⁵ Menzies Res. Inst., Tasmania, Australia	p.S15
3:30 PM – 4:00 PM	BREAK	
4:00 PM – 5:00 PM	Concurrent Session 3 Biomechanics (Cell & Tissue)	
4:00 PM – 4:30 PM	Biomechanics (Cell & Tissue) <i>Robert Sah, MD, ScD</i>	
4:30 PM – 4:40 PM	19. EFFECT OF MINERALIZATION ON THE MATERIAL PROPERTIES OF ARTICULAR CARTILAGE IN THE RAT M.L. Roemhildt , B. Beynnon, K. Anderson; <i>Univ. of Vermont, Burlington, VT, USA</i>	p.S15

4:40 PM – 4:50 PM	20. ACTIVATION OF AMP-ACTIVATED PROTEIN KINASE (AMPK) INHIBITS BIOMECHANICAL INJURY-INDUCED CATABOLIC RESPONSES OF ARTICULAR CHONDROCYTES F. Petursson ¹ , M. Husa ¹ , R. June ¹ , D. D'Lima ^{2,3} , R. Terkeltaub ¹ , R. Liu-Bryan¹ ; ¹ VAMC Med.-Rheumatology, UCSD, San Diego, CA, USA; ² Shiley Ctr. for Orthopaedic Res. and Ed., Scripps Clinic, La Jolla, CA, USA ; ³ The Scripps Res. Inst., La Jolla, CA, USA	p. S16
4:50 PM – 5:00 PM	21. LOAD-INDUCED PROGRESSIVE LESIONS ARE ASSOCIATED WITH PROTEOGLYCAN LOSS BUT NOT WITH CELL DEATH. B. Poulet¹ , I.M. Khan ² , C.W. Archer ² , A.A. Pistillides ¹ ; ¹ The Royal Vet. Coll., London, United Kingdom; ² Cardiff Sch. of BioSci.s, Cardiff, United Kingdom	p. S16
4:00 PM – 5:00 PM	Concurrent Session 4 Biomechanics (Clinical Perspectives)	
4:00 PM – 4:30 PM	I-3. Biomechanics (Clinical Perspectives) Tom Andriacchi, PhD	p. S1
4:30 PM – 4:40 PM	22. ABILITY OF PEAK KNEE ADDUCTION MOMENT AND KNEE ADDUCTION MOMENT IMPULSE TO DISTINGUISH BETWEEN CLINICAL AND STRUCTURAL DISEASE SEVERITY C.O. Kean , R.S. Hinman, K. Bowles, K.L. Bennell; Univ. of Melbourne, Melbourne, Australia	p. S16
4:40 PM – 4:50 PM	23. INCREASED DYNAMIC KNEE JOINT LOAD ON THE NON-OPERATIVE LIMB AFTER HIGH TIBIAL OSTEOTOMY A. Boulougouris¹ , T.B. Birmingham ² , R.F. Moyer ¹ , I.C. Jones ¹ , J. Giffin ³ ; ¹ Wolf Orthopaedic Biomechanics Laboratory, London, ON, Canada; ² The University of Western Ontario, London, ON, Canada ; ³ Fowler Kennedy Sport Med. Clinic, London, ON, Canada	p. S17
4:50 PM – 5:00 PM	24. GAIT CHARACTERISTICS AND POTENTIAL EFFECT OF SUPERVISED EXERCISE THERAPY IN HIP OSTEOARTHRITIS PATIENTS WITH MILD TO MODERATE PAIN. A RANDOMIZED CONTROLLED TRIAL. I. Eitzen¹ , L. Fernandes ^{1,2} , K. Rydevik ¹ , L. Nordsletten ³ , M. Risberg ¹ ; ¹ NAR/Oslo Univ. Hosp., Dept. of Orthopaedics, The Norwegian Sch. of Sports Sci. and Hjelpl24 NIMI, Oslo, Norway; ² Natl. Resource Ctr. for Rehabilitation in Rheumatology, Dept. of Rheumatology, Diakonhjemmet Hosp., Oslo, Norway ; ³ Oslo Univ. Hosp., Dept. of Orthopaedics, Oslo, Norway	p. S17
5:00 PM – 5:30 PM	BREAK	
5:30 PM – 6:15 PM	Presidential Address, Opening Ceremony / Lifetime Achievement Award	
5:30 PM – 6:00 PM	Presidential Address Linda Sandell, PhD	
6:00 PM – 6:10 PM	Recognition of Young Investigators	
6:10 PM – 6:15 PM	Lifetime Achievement Award Dick Heinegard, MD, PhD	
6:15 PM – 6:45 PM	I-4. Keynote Presentation: Systems Biology: Bridging the Gap Between Molecules, Animal Models and OA Patients William Stanford, PhD	p. S2
7:00 PM – 8:30 PM	Opening Reception with Exhibitors	

Friday, September 16, 2011

- 7:30 AM – 9:00 AM **Satellite Breakfast Symposium**
Symptom Control in Osteoarthritis: Evidence with SYSADOAs, Sponsored by Bioiberica
- 7:30 AM – 8:30 AM I-5. Breakfast Workshop A – Cell Therapy Options p. S2
A. Hari Reddi, PhD
- 7:30 AM – 8:30 AM Breakfast Workshop B – Setting Up Clinical Trials
Timothy McAlindon, MD, MPH
- 9:00 AM – 10:00 AM **Plenary Session 2**
Basic and Clinical Award Presentations and OARSI Business Meeting
- 10:00 AM – 10:30 AM BREAK
- 10:30 AM – 12:00 PM **Concurrent Session 5**
Inflammation & Immunity in OA
- 10:30 AM – 11:00 AM I-6. Inflammation & Immunity in OA p. S2
Ru Liu-Bryan, PhD
- 11:00 AM – 11:10 AM 25. ELUSIVE ROLE FOR TOLL LIKE RECEPTOR 2 IN JOINT PATHOLOGY DURING EXPERIMENTAL p. S18
OSTEOARTHRITIS.
A.B. Blom, P.L. van Lent, S. Abdollahi-Roodsaz, P. van der Kraan, W. van den Berg; *Radboud Univ. Nijmegen Med. Ctr., Nijmegen, Netherlands*
- 11:10 AM – 11:20 AM 26. SYNOVIAL FLUID FROM PATIENTS WITH OSTEOARTHRITIS AND MENISCAL INJURY MODULATES p. S18
THE RESPONSE OF FIBROBLAST-LIKE SYNOVIOCYTES TO TLR-2 AND TLR-4 LIGANDS VIA SOLUBLE CD14
C.R. Scanzello¹, A. Nair¹, V. Kanda¹, C. Bush-Joseph¹, N. Verma¹, S. Chubinskaya¹, K. Mikecz¹, A-M. Malfait¹, M.K. Crow², G.T. Spear¹, A. Finnegan¹; ¹*Rush Univ. Med. Ctr., Chicago, IL, USA*; ²*Hosp. for Special Surgery, New York, NY, USA*
- 11:20 AM – 11:30 AM 27. SOLUBLE PROTEINS DERIVED FROM INFRAPATELLAR FAT PAD ADIPOCYTES OF OSTEOARTHRITIS p. S18
PATIENTS MODULATE CD4+ T CELL CYTOKINE PRODUCTION
A. Ioan-Facsinay, J.C. Kwekkeboom, M. Kloppenburg, R.E. Toes; *Leiden Univ. Med. Ctr., Leiden, Netherlands*
- 11:30 AM – 11:40 AM 28. TENASCIN-C LEVELS IN SYNOVIAL FLUID ARE ELEVATED AFTER HUMAN JOINT INJURY AND p. S19
CORRELATE WITH MARKERS OF MATRIX DEGRADATION AND INFLAMMATION
P.S. Chockalingam¹, W. Sun¹, **S. Lohmander**^{2,3}; ¹*Inflammation & Remodelling, Pfizer, Cambridge, MA, USA*; ²*Lund Univ., Lund, Sweden*; ³*Univ. of Southern Denmark, Odense, Denmark*
- 11:40 AM – 11:50 AM 29. “ALARMINS” S100A8 AND A9 ARE EXPRESSED IN THE SYNOVIUM OF EARLY OA PATIENTS AND p. S19
ARE INVOLVED IN DRIVING SYNOVIAL ACTIVATION AND JOINT DESTRUCTION DURING EXPERIMENTAL OSTEOARTHRITIS.
P. van Lent; *Radboud Univ. Nijmegen Med. Ctr., Nijmegen, Netherlands*
- 11:50 AM – 12:00 PM 30. ONCOSTATIN M POTENTLY INDUCES IL-6 AND RANKL EXPRESSION IN MOUSE SYNOVIAL p. S20
FIBROBLASTS AND SIGNIFICANTLY ENHANCES THE EFFECTS OF IL-1 AND TNF
B. Le Goff¹, B.A. Tonkin¹, S. Singbrant¹, T.J. Martin^{1,2}, E. Romas^{1,2}, N.A. Sims^{1,2}, **N.C. Walsh**^{1,2}; ¹*St Vincent's Inst. of Med. Res., Melbourne, Australia*; ²*Dept. of Med., St Vincent's Hosp., Univ. of Melbourne, Melbourne, Australia*
- 10:30 AM – 12:00 PM **Concurrent Session 6**
Societal, Psychological & Economic Impact of OA
- 10:30 AM – 11:00 AM I-7. Qualitative Research for Osteoarthritis: Better Understand Patients and Care Providers Views and p. S2
Needs to Improve Management Strategies
Serge Poiradeau, MD, PhD
- 11:00 AM – 11:10 AM 31. SMART, THIN WOMEN WITH HIGHER VITAMIN D INTAKE AND TALL MEN WITH A HAPPY p. S20
CHILDHOOD ARE PROTECTED FROM ULTRASOUND FEATURES OF HIP OSTEOARTHRITIS: THE NEWCASTLE THOUSAND FAMILIES STUDY
A. Abraham¹, M.S. Pearce¹, K.D. Mann¹, R.M. Francis², F. Birrell³; ¹*Inst. of Hlth.and Society, Newcastle Univ., Newcastle upon Tyne, United Kingdom*; ²*Inst. for Ageing and Hlth., Newcastle Univ., Newcastle upon Tyne, United Kingdom*; ³*Musculoskeletal Res. Group, Inst. of Cellular Med., Newcastle Univ., Newcastle upon Tyne, United Kingdom*

- 11:10AM – 11:20AM 32. ESTIMATING THE LIFETIME RISK OF TOTAL HIP AND KNEE REPLACEMENT IN THE UNITED KINGDOM p.S21
D. Culliford¹, A. Kiran², A. Judge², N.K. Arden²; ¹Univ. of Southampton, Southampton, United Kingdom; ²Univ. of Oxford, Oxford, United Kingdom
- 11:20AM – 11:30AM 33. IDENTIFYING PREDICTORS OF PATIENT REPORTED OUTCOMES OF PRIMARY HIP REPLACEMENT SURGERY: A MULTI-CENTRE POPULATION BASED COHORT STUDY p.S21
A. Judge¹, R. Batra¹, D. Beard¹, G. Thomas¹, M. Javaid^{1,2}, C. Cooper^{1,2}, K. Barker^{3,1}, J.G. Andrew⁴, D. Murray¹, N.K. Arden^{1,2}; ¹Oxford NIHR Musculoskeletal BioMed. Res. Unit, Nuffield Dept. of Orthopaedics, Rheumatology and Musculoskeletal Sci., Univ. of Oxford, Oxford, United Kingdom; ²MRC Epidemiology Resource Ctr., Univ. of Southampton, Southampton, United Kingdom ; ³Physiotherapy Res. Unit, BRU, Univ. of Oxford & Nuffield Orthopaedic Ctr. NHS Trust, Oxford, United Kingdom ; ⁴Dept. of Orthopaedics, Ysbyty Gwynedd District Hosp., Bangor, United Kingdom
- 11:30AM – 11:40AM 34. OUTCOMES FOLLOWING TOTAL KNEE REPLACEMENT SURGERY FOR OA: THERE IS MORE THAN JUST THE KNEE TO CONSIDER p.S22
A.V. Perruccio¹, J.D. Power¹, E.M. Badley¹, R. Gandhi², N.N. Mahomed², A.M. Davis¹; ¹Toronto Western Res. Inst.; Univ. of Toronto, Toronto, ON, Canada; ²Toronto Western Hosp.; Univ. of Toronto, Toronto, ON, Canada
- 11:40AM – 11:50AM 35. USE AND COSTS OF PHARMACOLOGIC AND ALTERNATIVE TREATMENTS IN PATIENTS WITH OSTEOARTHRITIS IN COMMUNITY BASED SETTINGS IN THE UNITED STATES p.S22
M. Gore¹, **A. Sadosky**², D. Leslie³, K-S. Tai¹, B.R. Stacey⁴; ¹Avalon Hlth.Solutions, Inc, Philadelphia, PA, USA; ²Pfizer, Inc., New York, NY, USA ; ³Penn State Coll. of Med., Hershey, PA, USA ; ⁴Oregon Hlth.and Sci. Univ., Portland, OR, USA
- 11:50AM – 12:00PM 36. A HIGH PREVALENCE AND IMPACT OF CHRONIC JOINT SYMPTOMS IN THE YOUNGER POPULATION: IS THIS OSTEOARTHRITIS? p.S22
M. Canizares, E.M. Badley; Univ. Hlth.Networks, Toronto, ON, Canada
- 12:00PM – 1:30PM **Satellite Lunch Symposium**
I.A. Hyaluronic Acid: A Suitable Option to Improve Joint Mobility for Patient Well-Being, Sponsored by IBSA
- 1:30PM – 3:00PM **Concurrent Session 7**
Micro-RNA & Posttranscriptional Gene Regulation
- 1:30PM – 2:00PM 1-8. The Role of MIR-140 in OA Pathogenesis p.S3
Hiroshi Asahara, MD, PhD
- 2:00PM – 2:10PM 37. THE mtDNA HAPLOGROUP J MODULATES THE NITRIC OXIDE (NO) PRODUCTION AND TELOMERE LENGTH. ROLE IN OSTEOARTHRITIS (OA) p.S23
I. Rego-Pérez¹, M. Tamayo², Á. Soto-Hermida¹, A. Mosquera², M. Fernández-Moreno¹, N. Oreiro¹, C. Fernández-López¹, J.L. Fernández², M. Acasuso³, **F.J. Blanco**¹; ¹INIBIC-CHUAC. Rheumatology Div., A Coruña, Spain; ²INIBIC-CHUAC. Genetics Unit, A Coruña, Spain ; ³Centro de Salud San José – SERGAS, A Coruña, Spain
- 2:10PM – 2:20PM 38. LOSS OF METHYLATION IN CPG SITES IN THE NUCLEAR FACTOR KAPPA B (NF-κB) ENHANCER ELEMENTS OF INDUCIBLE NITRIC OXIDE SYNTHASE (INOS) IS RESPONSIBLE OF GENE INDUCTION IN HUMAN ARTICULAR CHONDROCYTES p.S23
M.C. de Andrés^{1,2}, K. Imagawa¹, K. Hashimoto³, M.B. Goldring³, A. Gonzalez², J.J. Gomez-Reino², H.I. Roach¹, R.O. Oreffo¹; ¹Univ. of Southampton. Sch. of Med., Southampton, United Kingdom; ²Hosp. Clinico Univ.rio de Santiago, Santiago de Compostela, Spain ; ³Hosp. for Special Surgery, New York, NY, USA
- 2:20PM – 2:30PM 39. ESSENTIAL ROLE OF microRNA-146a IN THE PATHOGENESIS OF OSTEOARTHRITIS p.S24
X. Zhang, J. Li, K. Dai; The Key Lab. of Stem Cell Biology, Inst. of Hlth.Sci., Shanghai Jiao Tong Univ. Sch. of Med. (SJTUSM) & Shanghai Inst.s for Biological Sci. (SIBS), Chinese Academy of Sci. (CAS), Shanghai, China
- 2:30PM – 2:40PM 40. OVEREXPRESSION OF hsa-miR-148A PROMOTES TYPE II COLLAGEN SYNTHESIS BY OSTEOARTHRITIC CHONDROCYTES p.S25
L.A. Vonk¹, A.H. Kragten¹, D.B. Saris¹, W.J. Dhert^{1,2}, L.B. Creemers¹; ¹UMC Utrecht, Utrecht, Netherlands; ²Univ. of Utrecht, Utrecht, Netherlands
- 2:40PM – 2:50PM 41. CHANGES IN GENE EXPRESSION WITH AGE AND OSTEOARTHRITIS IN THE MOUSE KNEE JOINT p.S25
R. Loeser¹, A. Olex¹, M.A. McNulty², C.S. Carlson³, M. Callahan¹, C. Ferguson¹, J.S. Fetrow¹; ¹Wake Forest Univ., Winston Salem, NC, USA; ²Universtiy of Minnesota, St. Paul, MN, USA ; ³Univ. of Minnesota, St. Paul, MN, USA
- 2:50PM – 3:00PM 42. NFAT3 SPECIFICALLY REGULATES MIR-140 TRANSCRIPTION IN HUMAN OSTEOARTHRITIC CHONDROCYTES p.S25
G. Tardif, D. Hum, H. Fahmi, J-P. Pelletier, **J. Martel-Pelletier**; Osteoarthritis Res. Unit, Univ. of Montreal Hosp. Res. Ctr. (CRCHUM), Montreal, QC, Canada

1:30PM – 3:00PM	Concurrent Session 8 Hand OA: A Disease in Need of Treatment	
1:30PM – 2:00PM	1-9. Hand OA: A Disease in Need of Treatment <i>Krysia Dziedzic, PhD</i>	p. S3
2:00PM – 2:10PM	43. EROSION THUMB BASE OSTEOARTHRITIS IN SYMPTOMATIC COMMUNITY-DWELLING ADULTS: THE KEELE CLINICAL ASSESSMENT STUDIES W-Y. Kwok ¹ , M. Kloppenburg ¹ , M. Marshall ² , E. Nicholls ² , F.R. Rosendaal ³ , D.A. van der Windt ² , G. Peat ² ; ¹ Leiden Univ. Med. Ctr., Dept. of Rheumatology, Leiden, Netherlands; ² Arthritis Res. UK Primary Care Ctr., Keele, North Staffordshire, United Kingdom ; ³ Leiden Univ. Med. Ctr., Dept. of Clinical Epidemiology, Leiden, Netherlands	p. S26
2:10PM – 2:20PM	44. COMPARATIVE ANALYSIS OF BONE EROSIONS AND CYSTS IN RHEUMATOID ARTHRITIS, PSORIATIC ARTHRITIS AND EROSION HAND OSTEOARTHRITIS S. Finzel ¹ , C. Ernet ¹ , C. Stach ¹ , K. Engelke ² , M. Englbrecht ¹ , G. Schett ¹ ; ¹ Univ. Clinic of Erlangen-Nuremberg, Erlangen, Germany; ² Univ. of Erlangen-Nuremberg, Erlangen, Germany	p. S26
2:20PM – 2:30PM	45. MRI IN HAND OSTEOARTHRITIS: VALIDATION OF THE OSLO HAND OSTEOARTHRITIS MRI-SCORING METHOD AND ASSOCIATION WITH PAIN W-Y. Kwok ¹ , M.C. Kortekaas ¹ , M. Reijnders ² , D. van der Heijde ^{1,3} , J.L. Bloem ² , M. Kloppenburg ¹ ; ¹ Leiden Univ. Med. Ctr., Dept. of Rheumatology, Leiden, Netherlands; ² Leiden Univ. Med. Ctr., Dept. of Radiology, Leiden, Netherlands ; ³ Diakonhjemmet Hosp., Dept. of Rheumatology, Oslo, Norway	p. S26
2:30PM – 2:40PM	46. THE ASSOCIATION BETWEEN EROSION HAND OSTEOARTHRITIS AND SUBCHONDRAL BONE ATTRITION OF THE KNEE I.K. Haugen ¹ , D.T. Felson ² , M. Englund ^{3,2} , K. Wang ² , P. Aliabadi ⁴ , A. Guermazi ² , F. Roemer ^{2,5} , T. Neogi ² ; ¹ Diakonhjemmet Hosp., Oslo, Norway; ² Boston Univ., Boston, MA, USA ; ³ Lund Univ., Lund, Sweden ; ⁴ Brigham and Women's Hosp., Boston, MA, USA ; ⁵ Klinikum Augsburg, Augsburg, Germany	p. S27
2:40PM – 2:50PM	47. METRIC PROPERTIES OF IMAGING METHODS IN OSTEOARTHRITIS OF THE HAND: A SYSTEMATIC REVIEW. M.S. Saltzherr , R.W. Selles, S.M. Bierma-Zeinstra, G.S. Muradin, J.H. Coert, J.W. van Neck, J.J. Luime; Erasmus MC, Rotterdam, Netherlands	p. S27
2:50PM – 3:00PM	48. WHAT TYPE OF ACTIVITY LIMITATIONS DO PATIENTS WITH HAND OSTEOARTHRITIS EXPERIENCE? AN INTERVIEW STUDY OF 162 PATIENTS. L. Fernandes ¹ , M. Grotle ¹ , S. Darre ² , R. Nossu ² , I. Kjekken ¹ ; ¹ Natl. Resource Ctr. for Rehabilitation in Rheumatology, Diakonhjemmet Hosp., Oslo, Norway; ² St Olavs Hosp., Trondheim, Norway	p. S28
3:00PM – 4:30PM	Poster Session 1	
4:30PM – 6:00PM	Plenary Session 3 Highest Rated Abstracts from Young Investigators	
4:30PM – 4:40PM	49. EXOSOMES CONTAINING MICRORNAS FUNCTION IN A NOVEL COMMUNICATION PATHWAY AMONG JOINT TISSUE CELLS T. Takada ¹ , T. Kato ¹ , T. Nakasa ¹ , H. Asahara ² , M. Lotz ² , M. Ochi ¹ , S. Miyaki ¹ ; ¹ Hiroshima Univ., Hiroshima, Japan; ² The Scripps Res. Inst., La Jolla, CA, USA <i>Young Investigator Award Winner</i>	p. S28
4:40PM – 4:50PM	50. IN VITRO KNOCKDOWN OF SOX9 AFFECTS CELL SURVIVAL VIA P21 AND CYCLIN D1 AND FAVORS OSTEOGENIC DIFFERENTIATION OF MSC S. Stoeckl ^{1,2} , A. Bosserhoff ³ , C. Göttl ^{1,2} , J. Grifka ² , S. Grässel ^{1,2} ; ¹ Ctr. for Med. Biotechnology, Regensburg, Germany; ² Orthopaedic Surgery, Experimental Orthopaedics, Regensburg, Germany ; ³ Dept. of Pathology, Regensburg, Germany <i>Young Investigator Award Winner</i>	p. S29
4:50PM – 5:00PM	51. FIBROBLAST GROWTH FACTORS 18 AND 9 REGULATE CHONDROGENIC DIFFERENTIATION OF HUMAN MESENCHYMAL STEM CELLS D. Cornea ¹ , E. Rom ² , J.F. Welter ¹ , L. Duesler ¹ , A. Yaron ² , A.I. Caplan ¹ ; ¹ Case Western Reserve Univ., Cleveland, OH, USA; ² ProCore Ltd., Ness Ziona, Israel <i>Young Investigator Award Winner</i>	p. S29
5:00PM – 5:10PM	52. GSK-3 α AND GSK-3 β MODULATE EARLY STAGES OF CHONDROCYTE DIFFERENTIATION THROUGH PHOSPHORYLATION OF RELA/NF-KAPPAB P65 S. Itoh , T. Saito, M. Hirata, M. Ushita, T. Ikeda, K. Nakamura, U-i. Chung, H. Kawaguchi; <i>Sensory & Motor System Med., Univ. of Tokyo, Tokyo, Japan</i> <i>Young Investigator Award Winner</i>	p. S29

5:10 PM – 5:20 PM	53. THE TRANSCRIPTIONAL REGULATION OF MMP13 BY CPG METHYLATION IN HUMAN CHONDROCYTES: HIF2-ALPHA IS A POTENTIAL TARGET K. Hashimoto ¹ , M. Otero ¹ , K. Imagawa ² , M.C. de Andrés ² , H.I. Roach ² , R.O. Oreffo ² , M.B. Goldring ¹ ; ¹ Hosp. for Special Surgery, New York, NY, USA; ² Univ. of Southampton, Southampton, United Kingdom Young Investigator Award Winner	p.S30
5:20 PM – 5:30 PM	54. INTERACTION OF HUMAN MESENCHYMAL STROMAL CELLS AND REGULATORY T-CELLS IN OSTEOARTHRITIS S. Hagmann , B. Moradi, T. Müller, T. Dreher, S. Frank, W. Richter, T. Gotterbarm; Dept. of Orthopedics, Trauma Surgery and Paraplegiology, Heidelberg Univ. Hosp., Heidelberg, Germany Young Investigator Award Winner	p.S30
5:30 PM – 5:40 PM	55. MORE INFLAMMATORY SIGNS ON ULTRASOUND IN INTERPHALANGEAL JOINTS IN EROSION HAND OSTEOARTHRITIS M. Kortekaas , W-Y. Kwok, M. Reijnierse, T. Huizinga, M. Kloppenburg; Leiden Univ. Med. Ctr., Leiden, Netherlands Young Investigator Award Winner	p.S31
5:40 PM – 5:50 PM	56. THE ASSOCIATION OF PERIPHERAL AND CENTRAL SENSITIZATION WITH MUSCLE CO-ACTIVATION: A COMMON MECHANISM AFFECTING PAIN AND FUNCTION IN KNEE OA? T. Neogi ¹ , J. Scholz ² , J. Niu ¹ , D. Felson ¹ , N. Segal ³ , C. Woolf ⁴ , L. Arendt-Nielsen ⁵ , M. Nevitt ⁶ , L. Bradley ⁷ , L. Frey-Law ³ ; ¹ BUSM, Boston, MA, USA USA; ² Columbia, New York, NY USA ; ³ Iowa, Iowa City, IA, USA ; ⁴ Children's Hosp., Boston, MA, USA ; ⁵ Aalborg Univ., Aalborg, Denmark ; ⁶ UCSF, San Francisco, CA, USA ; ⁷ UAB, Birmingham, AL, USA Young Investigator Award Winner	p.S31
5:50 PM – 6:00 PM	57. IDENTIFICATION AND DIFFERENT LOCALIZATION OF PROTEINS IN THE SUPERFICIAL AND THE DEEP HUMAN OA CARTILAGE BY IMAGING MASS SPECTROMETRY B. Cillero-Pastor ¹ , G. Eijkel ¹ , A. Kiss ¹ , F. Blanco ² , R. Heeren ¹ ; ¹ AMOLF-FOM Inst., Netherlands Proteomics Ctr., Amsterdam, Netherlands; ² Osteoarticular and Aging Res. Lab., INIBIC-CHUAC, A Coruña, Spain Young Investigator Award Winner	p.S32
6:30 PM – 7:30 PM	Meet the Professor Mentorship Session for OARSI Young Investigators	
7:30 PM – 8:30 PM	Young Investigator Reception, Sponsored by EMD Serono, Inc.	

Saturday, September 17, 2011

- 7:30 AM – 9:00 AM **Satellite Breakfast Symposium**
Personalized Medicine: Tailoring Osteoarthritis Management to the Individual, Sponsored by Bioiberica
- 7:30 AM – 8:30 AM I-10. Breakfast Workshop C – Animal Models of OA Pain p.S3
Jeffrey Mogil, PhD
- 7:30 AM – 8:30 AM Breakfast Workshop D – How to Assess Lower Limb Mechanics and Function
Doug Gross, MPT, ScD, FAAOMPT
- 9:00 AM – 10:30 AM **Concurrent Session 9**
Cartilage Biology in OA
- 9:00 AM – 9:30 AM I-11. Cartilage Biology in Osteoarthritis: Activation of Matrix Degrading Enzymes p.S4
Christopher Little, PhD
- 9:30 AM – 9:40 AM 58. HIGH ADAMTS4 OR 5 ACTIVITY AND SEVERE ARTICULAR CARTILAGE AGGREGAN DEPLETION ONLY DO NOT LEAD TO OA IN YOUNG MICE UNDER STANDARD LABORATORY CONDITIONS p.S32
P.M. van der Kraan¹, F. Kolb², E.L. Vitters¹, S. Barbieri², U. Bodendorf², N. Gerwin², W.B. van den Berg¹; ¹Radboud Univ., Med. Ctr., Nijmegen, Netherlands; ²Novartis Inst.s for BioMed. Res., Basel, Switzerland
- 9:40 AM – 9:50 AM 59. CARTILAGE-SPECIFIC DELETION OF PPAR-GAMMA IN MICE RESULTS IN EARLY ENDOCHONDRAL OSSIFICATION DEFECTS AND ACCELERATED AGING-DEPENDENT DEVELOPMENT OF OSTEOARTHRITIS. p.S33
R. Monemdjou¹, F. Vasheghani¹, G. Perez¹, M. Blati¹, N. Taniguchi², M. Lotz², R. St-Arnaud³, H. Fahmi¹, J-P. Pelletier¹, J. Martel-Pelletier¹, F. Beier¹, **M. Kapoor**¹; ¹Univ. of Montreal, Montreal, QC, Canada; ²The Scripps Res. Inst., La Jolla, CA, USA ; ³Shriners Hosp. for Children, Montreal, QC, Canada
- 9:50 AM – 10:00 AM 60. SIRT1-DEFICIENT MICE EXHIBIT AN ALTERED CARTILAGE PHENOTYPE AND UNDERGO INCREASED CARTILAGE BREAKDOWN AND APOPTOSIS. p.S33
O.H. Gabay¹, C. Sanchez², M. Dvir-Ginzberg³, V. Gagarina¹, E. Lee¹, K.J. Zaal¹, M.W. McBurney⁴, D.J. Hall¹; ¹NIH, Bethesda, MD, USA; ²Bone and Cartilage Res. Unit, Inst. of Pathology B23, Univ. of Liege, Liege, Belgium ; ³Lab. of Cartilage Biology, Inst. of Dental Sci., Faculty of Dental Med., Hebrew Univ. – Hadassah Ein Kerem, Jerusalem, Israel ; ⁴Cancer Therapeutics, Ottawa Hosp. Res. Inst., 501 Smyth Road, Box 926, Ottawa, ON, Canada
- 10:00 AM – 10:10 AM 61. ELIMINATION OF MITOCHONDRIA RELATED BIM/BID PROTEINS REDUCES CHONDROCYTE APOPTOSIS AFTER MECHANICAL INJURY p.S33
E. Eisner¹, C.G. Davis², J.J. Shelton¹, R.S. Hotchkiss², **C.C. Chen**¹, J. Borrelli¹; ¹UT SouthWestern Med. Ctr., Dallas, TX, USA; ²Washington Univ., St. Louis, MO, USA
- 10:10 AM – 10:20 AM 62. PERIOSTIN, AN OSTEOBLAST STIMULATING FACTOR, REGULATES CARTILAGE METABOLISM VIA MMP-13 ACTIVATION p.S34
M. Attur¹, G. Palmer¹, Y. Tachida², S. Kumakura², K. Shimada², S.B. Abramson¹; ¹NYUHosp. for Joint Diseases, New York, NY, USA; ²Daiichi-Sankyo Co. Ltd., Tokyo, Japan
- 10:20 AM – 10:30 AM 63. NATURAL HISTORY OF BONE AND CARTILAGE CHANGES IN OSTEOARTHRITIS IN GENETIC STRAINS OF MICE p.S34
S. Hashimoto, M.F. Rai, J.M. Cheverud, L.J. Sandell; Washington Univ. Sch. of Med., St. Louis, MO, USA
- 9:00 AM – 10:30 AM **Concurrent Session 10**
OA Clinical Trials
- 9:00 AM – 9:30 AM OA Clinical Trials
Marc Hochberg, MD, MPH
- 9:30 AM – 9:40 AM 64. ORAL CALCITONIN DEMONSTRATED SYMPTOM-MODIFYING EFFICACY AND INCREASED CARTILAGE VOLUME: RESULTS FROM A 2-YEAR PHASE 3 TRIAL IN PATIENTS WITH OSTEOARTHRITIS OF THE KNEE p.S35
M.A. Karsdal¹, P. Alexandersen², M.R. John³, J. Loeffler³, M. Arnold³, M. Azria³, I. Byrjalsen¹, B.J. Riis¹, C. Christiansen¹; ¹Nordic BioSci., Herlev, Denmark; ²Orla Lehmannsgade, Vejle, Denmark ; ³Novartis Pharma, Basel, Switzerland
- 9:40 AM – 9:50 AM 65. A RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED, MULTICENTER STUDY OF RHFGF18 ADMINISTERED INTRAARTICULARLY USING SINGLE OR MULTIPLE ASCENDING DOSES IN PATIENTS WITH PRIMARY KNEE OSTEOARTHRITIS (OA), NOT EXPECTED TO REQUIRE KNEE SURGERY WITHIN 1 YEAR p.S35
R. McPherson¹, **K. Flechsenhar**², S. Hellot², F. Eckstein^{3,4}; ¹PAREXEL Early Phase, Port Elizabeth, SOUTH AFRICA; ²Merck Serono S.A. (an affiliate of Merck KGaA, Darmstadt, Germany), Geneva, Switzerland ; ³Paracelsus Med. Univ., Salzburg, Austria ; ⁴Chondrometrics GmbH, Ainring, Germany

9:50AM – 10:00AM	66. ROLE OF VITAMIN D IN OSTEOARTHRITIS KNEE: A SIX MONTH DOUBLE BLIND, RANDOMIZED, PLACEBO CONTROL TRIAL D. Sanghi ¹ , R.N. Srivastava ¹ , S. Agarwal ² , S.M. Natu ¹ , A. Singh ¹ , S. Avasthi ³ ; ¹ CSM Med. Univ., Lucknow, India; ² SGPGIMS, Lucknow, India ; ³ GSM Med. Coll., Kanpur, India	p.S36
10:00AM – 10:10AM	67. STRUCTURAL TISSUE CHANGES AND PROLONGED CLINICAL IMPROVEMENT BY JOINT DISTRACTION IN TREATMENT OF END-STAGE KNEE OSTEOARTHRITIS; THE 2 YEARS FOLLOW-UP K. Wiegant ¹ , P.M. van Roermund ² , F. Intema ² , A.C. Marijnissen ¹ , S. Cotofana ³ , F. Eckstein ³ , S.C. Mastbergen ¹ , F.P. Lafeber ¹ ; ¹ Rheumatology & Clinical Immunology, Univ. Med. Ctr. Utrecht, Utrecht, Netherlands; ² Orthopaedics, Univ. Med. Ctr. Utrecht, Utrecht, Netherlands ; ³ Inst. of Anatomical and Musculoskeletal research, Salzburg, Austria	p.S36
10:10AM – 10:20AM	68. EFFECTS OF VIDEO-BASED HOME EXERCISE ON CLINICAL AND RADIOGRAPHIC OUTCOMES IN ADULTS WITH KNEE OSTEOARTHRITIS: A ONE-YEAR RANDOMIZED CONTROLLED TRIAL H. Tohyama ¹ , T. Chiba ¹ , U. Kou ² , H. Oka ³ , H. Kawaguchi ⁴ , K. Nakamura ⁴ , K. Ikoma ¹ , K. Yasuda ² ; ¹ Hokkaido Univ. Hosp., Sapporo, Japan; ² Hokkaido Univ. Sch. of Med., Sapporo, Japan ; ³ 22nd Century Med. Ctr., The Univ. of Tokyo, Tokyo, Japan ; ⁴ Sensory and Motor System Med., The Univ. of Tokyo, Tokyo, Japan	p.S37
10:20AM – 10:30AM	69. PROSPECTIVE STUDY OF NEW KNEES FUNCTIONAL BRACE AND NEW TYPE INSOLE FOR MEDIAL OSTEOARTHRITIS KNEE M. Deie , A. Okuhara, M. Toriyama, M. Ochi; <i>Hiroshima Univ., Hiroshima, Japan</i>	p.S37
10:30AM – 11:00AM	BREAK	
11:00AM – 12:30PM	Debate Is Subchondral Bone or Articular Cartilage the Best Target for DMOAD Development?	
11:00AM – 11:30AM	I-12. Bone <i>David Findlay, PhD</i>	p.S4
11:30AM – 12:00PM	Cartilage <i>Alan Grodzinsky, ScD</i>	
12:00PM – 12:30PM	Discussion	
12:30PM – 2:00PM	Workshop for Young Investigators with the Editors of Osteoarthritis and Cartilage	
2:00PM – 3:30PM	Concurrent Session 11 Chondrocyte Homeostasis	
2:00PM – 2:30PM	I-13. Chondrocyte Homeostasis <i>Richard Loeser, MD</i>	p.S4
2:30PM – 2:40PM	70. RBPJK-DEPENDENT NOTCH SIGNALING IS REQUIRED FOR ARTICULAR CARTILAGE AND JOINT MAINTENANCE A.J. Mirando, T. Moore, A. Lang, A.M. Jesse, A. Kohn, M.J. Zuscik, R.J. O'Keefe, M.J. Hilton ; <i>Univ. of Rochester Med. Ctr., Rochester, NY, USA</i>	p.S37
2:40PM – 2:50PM	71. NOTCH/RBPJ/HES1 SIGNAL IN CHONDROCYTES MODULATES TERMINAL STAGE OF ENDOCHONDRAL OSSIFICATION DURING SKELETAL GROWTH AND OSTEOARTHRITIS DEVELOPMENT Y. Hosaka ¹ , T. Saito ¹ , S. Sugita ¹ , A. Fukai ¹ , T. Hikata ² , H. Akiyama ³ , T. Nakamura ³ , K. Nakamura ¹ , U-I. Chung ⁴ , H. Kawaguchi ¹ ; ¹ Univ. of Tokyo, Graduate Sch. of Med., Tokyo, Japan; ² Keio Univ., Tokyo, Japan ; ³ Kyoto Univ., Kyoto, Japan ; ⁴ Ctr. for Disease Biology and Integrative Med., Univ. of Tokyo, Tokyo, Japan	p.S38
2:50PM – 3:00PM	72. ERG AND PTHRP GENETICALLY COOPERATE TO MAINTAIN ARTICULAR CARTILAGE LONG-TERM FUNCTION T. Okabe ¹ , Y. Ohta ² , S. Asai ² , S. Wakitani ³ , M. Enomoto-Iwamoto ² , M. Pacifici ² , M. Iwamoto ² ; ¹ Natl. Hosp. Organization, Shinshu Ueda Med. Ctr., Ueda, Nagano, Japan; ² Div. of Orthopedic Surgery, The Children's Hosp. of Philadelphia Res. Inst., Philadelphia, PA, USA ; ³ Sch. of Hlth.and Sports Sci., Mukogawa Women's Univ., Nishinomiya, Hyogo, Japan	p.S38
3:00PM – 3:10PM	73. SYNOVIAL OVEREXPRESSION OF WNTS AND WISP1 LEADS TO OA-LIKE CARTILAGE DAMAGE AND CHONDROCYTE PHENOTYPE CHANGE BY SKEWED TGF- β SIGNALING M.H. van den Bosch , A.B. Blom, P.L. van Lent, H.M. van Beuningen, F.A. van de Loo, E.N. Blaney Davidson, P.M. van der Kraan, W.B. van den Berg; <i>Radboud Univ. Nijmegen Med. Ctr., Nijmegen, Netherlands</i>	p.S39
3:10PM – 3:20PM	74. ADAMTS-7 CONSTITUTES A POSITIVE FEEDBACK LOOP WITH TNF α IN REGULATING CARTILAGE DEGRADATION AND OSTEOARTHRITIS Y. Lai ¹ , X. Bai ¹ , Q. Tian ¹ , Y. Chen ² , B. Lee ² , T. Appleton ³ , F. Beier ³ , C. Liu ¹ ; ¹ New York Univ., New York, NY, USA; ² Baylor Coll. of Med., Houston, TX, USA ; ³ Univ. of Western Ontario, London, ON, Canada	p.S39

3:20PM – 3:30PM	75. GENERATION OF A TRANSGENIC KNOCK-IN MOUSE MODEL EXPRESSING ONLY THE IIA ISOFORM OF TYPE II PROCOLLAGEN S. Ravindran ¹ , R. Lewis ¹ , R.J. Fernandes ² , A. McAlinden ¹ ; ¹ Washington Univ., St Louis, MO, USA; ² Univ. of Washington, Seattle, WA, USA	p. S40
2:00 PM – 3:30 PM	Concurrent Session 12 Pain Physiology in OA	
2:00 PM – 2:30 PM	I-14. Pain Physiology in OA Camilla Svensson, PhD	p. S4
2:30 PM – 2:40 PM	76. GREATER TROCHANTERIC PAIN IN HIP OSTEOARTHRITIS: INFLUENCE ON SYMPTOM SEVERITY A. Brinks, R. Rozendaal, B.W. Koes, J.A. Verhaar, S.M. Bierma-Zeinstra ; Erasmus MC, Univ. Med. Ctr., Rotterdam, Netherlands	p. S40
2:40 PM – 2:50 PM	77. ASSOCIATIONS BETWEEN INFLAMMATORY BIOMARKERS AND CHANGE IN KNEE PAIN OVER 5 YEARS IN OLDER ADULTS C. Ding ^{1,2} , O. Stannus ¹ , L. Blizzard ¹ , G. Jones ¹ ; ¹ Univ. of Tasmania, Hobart, Australia; ² Monash Univ., Melbourne, Australia	p. S40
2:50 PM – 3:00 PM	78. THE COURSE OF PAIN IN HIP OSTEOARTHRITIS; DEFINING TRAJECTORIES OVER A TWO YEARS TIME PERIOD S.P. Verkleij ¹ , T. Hoekstra ² , P.A. Luijsterburg ¹ , E. Waarsing ¹ , B.W. Koes ¹ , S.M. Bierma-Zeinstra ¹ ; ¹ Erasmus MC, Rotterdam, Netherlands; ² VU Univ., Amsterdam, Netherlands	p. S40
3:00 PM – 3:10 PM	79. THE ASSOCIATIONS BETWEEN LOW BACK PAIN, MORNING STIFFNESS AND LUMBAR DISC DEGENERATION: A ROTTERDAM STUDY. J. Scheele , E.I. de Schepper, P.A. Luijsterburg, A. Hofman, B.W. Koes, S.M. Bierma-Zeinstra; Erasmus MC, Univ. Med. Ctr., Rotterdam, Netherlands	p. S41
3:10 PM – 3:20 PM	80. ASSOCIATION BETWEEN SEVERE PAIN IN THE EARLY MONTHS FOLLOWING TOTAL KNEE REPLACEMENT AND FUNCTIONAL OUTCOMES OVER FIVE YEAR FOLLOW-UP J.N. Katz ¹ , E.A. Wright ¹ , E.A. Lingard ² , E. Losina ¹ ; ¹ Brigham and Women's Hosp., Boston, MA, USA; ² Registrar in Publ. Hlth., Newcastle upon Tyne, United Kingdom	p. S41
3:20 PM – 3:30 PM	81. IMPACT OF EXERCISE TYPE AND DOSE ON PAIN IN KNEE OSTEOARTHRITIS: A SYSTEMATIC REVIEW AND META-REGRESSION ANALYSIS C. Juhl ^{1,2} , R. Christensen ^{1,3} , E.M. Roos ¹ , W. Zhang ⁴ , H. Lund ¹ ; ¹ Res. Unit for Musculoskeletal Function and Physiotherapy, Odense, Denmark; ² Dept. of Physiotherapy, Gentofte Hosp., Copenhagen, Denmark ; ³ The Parker Inst.: Musculoskeletal Statistics Unit, Copenhagen Univ. Hosp., Frederiksberg, Denmark ; ⁴ Academic Rheumatology, Univ. of Nottingham, Nottingham, United Kingdom	p. S42
3:30PM – 5:00 PM	Poster Session 2	
5:00 PM – 6:00 PM	Concurrent Session 13 Genetics & Epigenetics of OA	
5:00 PM – 5:30 PM	I-15. Genetics and the Functional Analysis of OA Susceptibility Loci John Loughlin, PhD	p. S5
5:30 PM – 5:40 PM	82. THE ARCOGEN GENOME-WIDE ASSOCIATION STUDY K. Panoutsopoulou ; Wellcome Trust Sanger Inst., Hinxton, United Kingdom	p. S42
5:40 PM – 5:50 PM	83. ANALYSIS OF CANDIDATE OSTEOARTHRITIS GENES IN A META-ANALYSIS OF 8 GENOME-WIDE ASSOCIATION STUDIES C. Rodriguez-Fontela ¹ , E. Evangelou ² , A. Valdes ³ , M. Calaza ¹ , The arcOGEN Consortium, N.K. Arden ⁴ , S. Bos ⁵ , A. Cupples ⁶ , T. Esko ⁷ , J. Gomez-Reino ¹ , H. Helgadottir ⁸ , A. Hofman ^{9,10} , I. Jonsdottir ⁸ , H.J.M. Kerkhof ^{9,10} , I. Meulenbelt ^{5,10} , S. Metrustry ³ , A. Metspalu ⁷ , J. van Meurs ⁹ , E. Ntzani ² , K. Panoutsopoulou ⁴ , U. Styrkarsdottir ⁸ , U. Thorsteinsdottir ⁸ , G. Thorleifsson ⁸ , Y. Zhu ⁶ , D. Felson ⁶ , J. Ioannidis ² , K. Stefansson ⁸ , A. Uitterlinden ^{9,10} , E. Zeggini ⁴ , T. Spector ³ , A. Gonzalez ¹ ; ¹ Hosp. Clinico Univ.rio de Santiago, Santiago de Compostela, Spain; ² Dept. of Hygiene and Epidemiology, University of Ioannina School of Medicine, Ioannina, Greece ; ³ Dept of Twin Res. and Genetic Epidemiology, St. Thomas' Hospital, King's College London, United Kingdom ; ⁴ arcOGEN Consortium, Hinxton, United Kingdom ; ⁵ Section of Molecular Epidemiology, Leiden University Medical Centre, Leiden, Netherlands ; ⁶ Dept. of Biostatistics, Boston University School of Public Health, Boston, MA, USA ; ⁷ Estonian Genome Ctr., University of Tartu, Tartu, Estonia ; ⁸ deCODE Genetics, Reykjavik, Iceland ; ⁹ Dept. of Internal Med., Erasmus Medical Center, Rotterdam, Netherlands ; ¹⁰ The Netherlands Genomics Initiative-Sponsored Netherlands Consortium for Hlth.y Aging, Rotterdam, Netherlands	p. S42

5:50PM – 6:00PM	84. IDENTIFICATION OF INTERLEUKIN-16 AS A NOVEL EPIGENETICALLY-REGULATED FACTOR IN CHONDROGENIC DIFFERENTIATION OF ADULT STEM CELLS C. O'Flatharta ¹ , E. Mooney ¹ , G. Shaw ¹ , B. Ranera ² , G. McKenna ¹ , M. Berdasco ³ , M. Esteller ³ , F. Barry ¹ , M. Murphy ¹ ; ¹ REMEDI, Natl. Univ. of Ireland Galway, Galway, Ireland; ² Univ. de Zaragoza, Zaragoza, Spain ; ³ L'Hosp.et de Llobregat, Barcelona, Spain	p. S43
5:00PM – 6:00PM	Concurrent Session 14 Rehabilitation & Non-Pharmacological Interventions	
5:00PM – 5:30PM	I-16. Adherence to Best Practice in the Conservative Management of Osteoarthritis Nadine Foster, DPhil, BSc	p. S5
5:30PM – 5:40PM	85. NEUROMUSCULAR EXERCISE IMPROVES FUNCTIONAL PERFORMANCE IN PATIENTS WITH SEVERE HIP OSTEOARTHRITIS A. Villadsen ¹ , E.M. Roos ¹ , S. Overgaard ² , A. Holsgaard-Larsen ² ; ¹ Res. unit for musculoskeletal function and physiotherapy, Odense, Denmark; ² Orthopaedic Res. Unit, Dept. of Orthopaedics and Traumatology, Odense Univ. Hosp., Inst. of Clinical Res., Univ. of Southern Denmark, Odense, Denmark	p. S44
5:40PM – 5:50PM	86. TIME TO TOTAL HIP REPLACEMENT SURGERY AFTER SUPERVISED EXERCISE AND PATIENT EDUCATION IN PATIENTS WITH HIP OSTEOARTHRITIS. A RANDOMIZED INTERVENTION STUDY WITH BETWEEN 3.5 AND 6 YEARS FOLLOW-UP. I.C. Svege ¹ , L. Fernandes ² , L. Nordsletten ³ , M. Risberg ⁴ ; ¹ NAR, Dept. of Orthopaedics, Oslo Univ. Hosp. and Hjelp24NIMI, Oslo, Norway; ² NAR, Dept. of Orthopaedics, Oslo Univ. Hosp. and Hjelp24NIMI, and Natl. Resource Ctr. for Rehabilitation in Rheumatology, Dept. of Rheumatology, Diakonhjemmet Hosp., Oslo, Norway, Oslo, Norway ; ³ Dept. of Orthopaedics, Oslo Univ. Hosp. and Faculty of Med., Univ. of Oslo, Oslo, Norway ; ⁴ NAR, Dept. of Sport medicine, Norwegian Sch. of Sport Sci., Hjelp24 NIMI, and Dept. of Orthopaedics, Oslo Univ. Hosp., Oslo, Norway	p. S44
5:50PM – 6:00PM	87. WALKING LOADING AT THE KNEE PREDICTS MRI-DERIVED CARTILAGE THICKNESS CHANGES IN MEDIAL COMPARTMENT KNEE OSTEOARTHRITIS J. Erhart ^{1,2} , J. Favre ² , T. Andriacchi ^{2,1} ; ¹ Palo Alto VA, Palo Alto, CA, USA; ² Stanford Univ., Stanford, CA, USA	p. S45
7:30PM – 10:30PM	Congress Dinner	

Sunday, September 18, 2011

9:00 AM – 10:30 AM **Concurrent Session 15** **Stem Cell Therapies in OA**

- 9:00 AM – 9:30 AM I-17. Stem Cell Therapies in OA p. S5
Farshid Guilak, PhD
- 9:30 AM – 9:40 AM 88. GENOME WIDE EXPRESSION PROFILING OF NORMAL, RHEUMATOID AND OSTEOARTHRITIC p. S45
SYNOVIAL STEM CELLS
R.J. Krawetz, P.S. Lee, D.A. Hart, C.B. Frank; *Univ. of Calgary, Calgary, AB, Canada*
- 9:40 AM – 9:50 AM 89. NORMAL AND OSTEOARTHRITIC SYNOVIAL STEM CELL-DERIVED TISSUE-ENGINEERED p. S46
CONSTRUCTS RESPOND TO MECHANICAL STIMULUS FOLLOWING CHONDROGENIC DIFFERENTIATION
G. Buckley-Herd¹, R. Krawetz², D.A. Hart²; ¹*BioMed. Engineering, Univ. of Calgary, Calgary, AB, Canada*;
²*Dept. of Surgery, Univ. of Calgary, Calgary, AB, Canada*
- 9:50 AM – 10:00 AM 90. A QUANTITATIVE PROTEOMICS APPROACH FOR STUDYING THE CHONDROGENIC DIFFERENTIATION p. S46
PROCESS OF MESENCHYMAL STEM CELLS
B. Rocha, P. Fernández-Puente, J. Mateos, V. Calamia, L. Lourido, C. Fernández-Costa, C. Ruiz-Romero,
F.J. Blanco; *Osteoarticular and Aging Res. Lab., Proteomics Unit-Associated Node to ProteoRed-ISCIII, INIBIC-CHUAC, A Coruña, Spain*
- 10:00 AM – 10:10 AM 91. MESENCHYMAL STEM CELLS EXERT PARACRINE EFFECTS ON OSTEOARTHRITIC CARTILAGE AND p. S47
SYNOVIUM.
G.M. van Buul, E. Villafuertes, J.H. Waarsing, P.K. Bos, N. Kops, J.A. Verhaar, H. Weinans, M.R. Bernsen,
G.J. van Osch; *Erasmus MC, Rotterdam, Netherlands*
- 10:10 AM – 10:20 AM 92. DIRECT HUMAN CARTILAGE REPAIR USING THERMAL INKJET PRINTING TECHNOLOGY p. S47
X. Cui¹, K. Breitenkamp¹, M. Finn¹, M. Lotz¹, C. Colwell², D. D'Lima^{1,2}; ¹*The Scripps Res. Inst., La Jolla, CA, USA*; ²*Shiley Ctr. for Orthopaedic Res. and Ed. (SCORE) at Scripps Clinic, La Jolla, CA, USA*
- 10:20 AM – 10:30 AM 93. IDENTIFICATION OF CHONDROGENIC PROGENITOR CELLS IN INJURED BOVINE ARTICULAR p. S48
CARTILAGE.
Y. Yu, D. Seol, D. McCabe, H. Zheng, **J. Martin**; *Univ. of Iowa, Iowas City, IA, USA*

9:00 AM – 10:30 AM **Concurrent Session 16** **Hip Shape & OA: Prevention & Management**

- 9:00 AM – 9:30 AM I-18. Hip Shape & OA: Prevention & Management p. S5
Young Jo Kim, MD, PhD
- 9:30 AM – 9:40 AM 94. RELATIONSHIP BETWEEN HIP ADDUCTION MOMENT, HIP ABDUCTOR STRENGTH AND p. S49
PROGRESSION OF KNEE OSTEOARTHRITIS
C.O. Kean, K.L. Bennell, K. Bowles, R.S. Hinman; *Univ. of Melbourne, Melbourne, Australia*
- 9:40 AM – 9:50 AM 95. KNEE ALIGNMENT MAY INFLUENCE PERI-ARTICULAR BONE MORPHOLOGY p. S49
G.H. Lo^{1,2}, T.E. McAlindon³; ¹*Michael E. DeBakey Dept. of Veteran's Affairs Med. Ctr., Houston, TX, USA*;
²*Baylor Coll. of Med., Houston, TX, USA*; ³*Tufts Med. Ctr., Boston, MA, USA*
- 9:50 AM – 10:00 AM 96. RISK FACTORS FOR REVISION OF PRIMARY TOTAL HIP REPLACEMENT: A NATIONAL CASE CONTROL p. S50
STUDY WITH TWELVE YEAR FOLLOW-UP
J.N. Katz¹, E.A. Wright¹, J.A. Baron², H. Malchau³, N.N. Mahomed⁴, E. Losina¹; ¹*Brigham and Women's Hosp., Boston, MA, USA*; ²*Univ. of North Carolina, Chapel Hill, NC, USA*; ³*Massachusetts Gen. Hosp., Boston, MA, USA*; ⁴*Toronto Western Hosp., Toronto, ON, Canada*
- 10:00 AM – 10:10 AM 97. SAGITTAL PLANE HIP MOTION DURING GAIT AND FUNCTION AND DISABILITY IN KNEE p. S50
OSTEOARTHRITIS
K. Moisio, C. Colbert, O. Almagor, J. Chmiel, A. Chang, J. Zhang, S. Cahue, K. Hayes, C. Saurel, L. Sharma;
Northwestern Univ., Chicago, IL, USA
- 10:10 AM – 10:20 AM 98. DIAGNOSIS OF EARLY OSTEOARTHRITIS BY KNEE JOINT CONGRUITY QUANTIFIED AUTOMATICALLY p. S51
FROM MRI
S. Tummala¹, E.B. Dam², M. Nielsen^{1,2}; ¹*University of Copenhagen, Copenhagen, Denmark*; ²*BiomedIQ A/S, Rødovre, Denmark*
- 10:20 AM – 10:30 AM 99. MRI-BASED 3D BONE SHAPE PREDICTS INCIDENT KNEE OA 12-MONTHS PRIOR TO ITS ONSET p. S51
T. Neogi¹, M. Bowes², J. Niu¹, K. De Souza², J. Goggins¹, Y. Zhang¹, D. Felson¹; ¹*BUSM, Boston, MA, USA*;
²*Imorphics Ltd., Manchester, United Kingdom*

10:30 AM – 10:45 AM BREAK, Sapphire West Foyer

10:45 AM – 12:15 PM **Plenary Session 4**
OA Year in Review

I-19. Rehabilitation & Outcomes
Aileen Davis, BScPT, MSc, PhD

p. S6

Biology

Martin Lotz, MD

Clinical

Timothy McAlindon, MD, MPH

Genetics

Ingrid Meulenbelt, PhD

I-20. Biomarkers

p. S6

Yves Henrotin, PhD

I-21. Imaging

p. S6

Ali Guermazi, MD